

Notice of Allowability

Application No.

10/008,382

Applicant(s)

KOSS ET AL

Examiner

JAMES C. KERVEROS

Art Unit

2138

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to AMENDMENT filed 1/11/2005.
2. ☒ The allowed claim(s) is/are 1-8 and 10-16. Renumbered as claims 1-15.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>10/24/03</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

NOTICE OF ALLOWANCE

This is a Notice of Allowance in response to AMENDMENT filed 1/11/2005.

Claims 1-8 were previously examined. Claim 9 has been cancelled.

Claims 10-16 are new.

Claims 1-8 and 10-16 are allowed. Renumbered as claims 1-15.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Morley C. Tobey, Jr. on February 22, 2006.

CLAIM 1 has been substituted with the amended claim as follows:

Claim 1 (Currently Amended):

An electronic circuit for self-test of a random access memory array having a plurality of memory storage cells in a circuit, wherein the storage cells are organized into a plurality of slice arrays, comprising:

a control circuit, wherein the control circuit is embedded in a control and address block of the RAM circuit;

an address selection circuit, wherein the control circuit directs the address selection circuit to index through memory addresses;

one input/output circuit each associated with each slice array, wherein the control circuit directs each input/output circuit to write data into its associated slice array at an indexed memory address, to read data from the associated slice array at the indexed memory address, and to compare the data read from the associated slice array with that written into the associated slice array at the indexed memory address; and

an error detection circuit, wherein the error detection circuit collects results of self-test data comparisons from each input/output circuit and notifies the control circuit of the results of the self-test data comparisons, wherein:

when a defect is present in one of the slice arrays, the input/output circuit associated with the defective slice array redirects data intended for storage in the defective slice array to an adjacent slice array, and wherein:

when a defect is present in one of the slice arrays, the input/output circuit associated with the defective slice array redirects data read from the adjacent slice array of the defective slice array to the output of the defective slice array.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

The prior arts of record taken alone or in combination fail to teach, anticipate, suggest or render obvious the claimed invention recited in the independent claim 1, as currently amended, including inter alia, "when a defect is present in one of the slice

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arrays, the input/output circuit associated with the defective slice array redirects data intended for storage in the defective slice array to an adjacent slice array, and wherein, when a defect is present in one of the slice arrays, the input/output circuit associated with the defective slice array redirects data read from the adjacent slice array of the defective slice array to the output of the defective slice array”.

Claims 2-4, 10 are directly depended upon claim 1, and therefore are also allowable.

Claims 5-8, previously objected to for having allowable subject matter as being dependent upon a rejected base claim, have been rewritten in independent form, as claims 5 and 7, including all of the limitations of the base claim. The prior arts of record taken alone or in combination fail to teach, anticipate, suggest or render obvious the claimed invention as recited in claims 5 and 7.

Claims 6-8, 11-16 are directly depended upon claims 5 and 7, and therefore are also allowable.

Consequently, Claims 1-8 and 10-16 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES C. KERVEROS whose telephone number is (571) 272-3824. The examiner can normally be reached on 9:00 AM TO 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

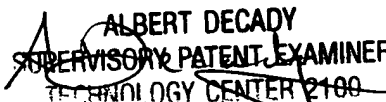
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Date: 23 February 2006
Office Action: Allowance

JAMES C KERVEROS
Examiner
Art Unit 2138

By: 


ALBERT DECADY
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